Video Conference Monitor

User Manual

The color and the appearance may differ depending on the product, and the specifications are subject to change without prior notice to improve the performance.

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1 Major Safety Precautions

1-1 Before You Start

Icons used in this manual

ICON	NAME	MEANING
	Caution	Indicates cases where the function may not work or the setting may be canceled.
	Note	Indicates a hint or tip to operate a function.

Using this Manual

- Make yourself fully aware of the safety precautions before using this product.
- If a problem occurs, refer to the 'Troubleshooting' section.

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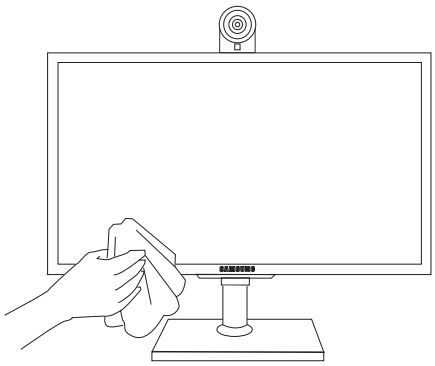
1-2 Custody and Maintenance

External Surface and Screen Maintenance

Clean the product with a soft dry cloth.



- Do not clean the product with a flammable substance such as benzene or thinner, or clean with a wet cloth. This can cause a problem with the product.
- Do not scratch the screen with your fingernails or a sharp object.
  This can cause permanent scratches and damage to the product.
- Do not clean the product by spraying water directly onto the product.
  If water enters the product, it can cause fire, electric shock, or a problem with the product.
- Do not use a supersonic humidifer near the monitor. A supersonic humidifier can cause a white stain to appear on the high-gloss portions of the product due to the inherent characteristics of the high golss material.

The appearance and the color may differ depending on the model.

About persistent images

- Displaying a still image for a long time can create a persistent image or stain on the screen. If you intend to leave the display on, but will not use it for a long time, set the power-saving mode or a screen saver on to protect the screen.
- An LCD panel is made up of millions of sub-pixels. Due to the technological constraints of LCD panel manufacture, approximately one out of every 1 million sub-pixels appears either brighter or darker than normal.
  To calculate the number of sub-pixels on your LCD panel, multiply the Max. Horizontal Resolution by the Max. Vertical Resolution, and then multiply that result by 3.
  Example: If the maximum resolution of your LCD panel is 1680 x 1050, the number of sub-pixels = 1680 x 1050 x 3 which equals 5,292,000.

Icons used for safety precautions

ICON	NAME	MEANING
	Warning	Failing to follow the precautions marked with this sign may result in a serious injury or even a fatality.
	Caution	Failing to follow the precautions marked with this sign may result in a personal injury or property damage.

Meaning of Signs

Do not perform.

Do not disassemble.

Do not touch.

Must be followed.

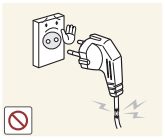
The power plug must be unplugged from the wall outlet.

Must be grounded to prevent electric shock.

Power Related

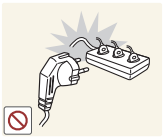
The following images are for your reference and may differ depending on models and countries.

Warning



Avoid using a damaged power cord or plug or a loose power outlet.

- Otherwise, it may result in electric shock or fire.

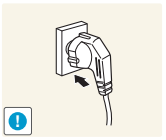


Avoid connecting multiple electric appliances to a single wall outlet.

- Otherwise, it may result in fire due to overheating of the wall outlet.

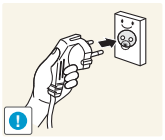
Avoid plugging in or unplugging the power supply with wet hands.

- Otherwise, it may result in electric shock.



Plug the power plug in firmly.

- Otherwise, it may result in fire.



Make sure to connect the power cord to a grounded wall outlet (for insulation class 1 equipment only).

- Otherwise, it may result in electric shock or injury.

Avoid bending or twisting the power cord excessively and avoid placing heavy objects on the cord.

- Otherwise, it may result in electric shock or fire due to a damaged power cord.

Keep the power cord and the product away from a heater.

- Otherwise, it may result in electric shock or fire.

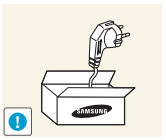
If the pins of the power plug or the wall outlet are covered in dust, clean it using a dry cloth.

- Otherwise, it may result in fire.

Caution

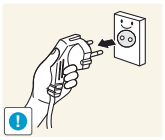
Avoid unplugging the power plug while the product is operating.

- Otherwise, it may damage the product due to electric shock.



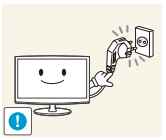
Make sure to use only the power cord supplied by our company. In addition, do not use the power cord of another electric appliance.

- Otherwise, it may result in electric shock or fire.



When unplugging the power plug from the wall outlet, make sure to hold it by the plug and not by the cord.

- Otherwise, it may result in electric shock or fire.



Connect the power plug to a wall outlet that can be easily reached.

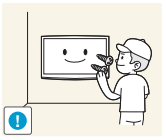
- When a problem occurs with the product, you must unplug the power plug to cut the power off completely. You cannot cut the power off completely using only the power button on the product.

Installation Related

Warning

Avoid placing burning candles, mosquito-repellent or cigarettes on the product and installing the product near a heater.

- Otherwise, it may result in fire.

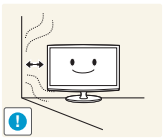


Ask an installation engineer or relevant company to install the product onto the wall.

- Otherwise, it may result in injury.
- Make sure to use the specified wall mount.

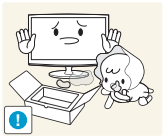
Avoid installing the product in a badly-ventilated location such as inside a bookshelf or closet.

- Otherwise, it may result in fire due to internal over-heating.



Keep a distance of at least 10 cm from the wall when installing the product for ventilation.

- Otherwise, it may result in fire due to internal over-heating.



Keep the plastic bags used to pack the product away from children.

- If children place the plastic bags over their heads, they may suffocate.

Avoid installing the product in a location that is unstable or exposed to excessive vibrations such as on an unstable or slanted shelf.

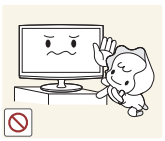
- The product may fall and this may result in damage to the product or injury.
- If you use the product in a location exposed to excessive vibrations, it may result in a problem with the product or fire.

Avoid installing the product in a location exposed to dust, moisture (sauna), oil, smoke or water (rain drops) and installing it within a vehicle.

- This may result in electric shock or fire.

Avoid installing the product in a location exposed to direct sunlight and installing the product near a heat source such as a fire or heater.

- This may shorten the product life cycle or cause fire.



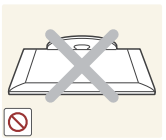
Avoid installing the product at an easily reachable height where children may reach it.

- If a child touches the product, the product may fall and this may result in injury.
- Since the front part is heavier, install the product on a flat and stable surface.

Caution

Do not let the product drop while moving it.

- This may result in a problem with the product or injury.



Do not place the product face down on the floor.

- This may damage the panel of the product.

When installing the product on a console or shelf, make sure that the front of the product does not protrude out of the console or shelf.

- Otherwise, this may cause the product to fall off and result in a malfunction or injury.
- Make sure to use a cabinet or shelf suitable to the size of the product.

When putting the product down, handle it gently.

- Otherwise, it may result in a problem with the product or injury.

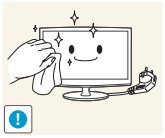
If the product is installed in a location where the operating conditions vary considerably, a serious quality problem may occur due to the surrounding environment. In this case, install the product only after consulting one of our service engineers about the matter.

- Places exposed to microscopic dust, chemicals, too high or low temperature, high humidity, such as airports or stations where the product is continuously used for a long time and so on.

Cleaning Related

Since using a surfactant, which contains a large amount of alcohol, solvent or other strong chemicals, may result in the discoloration or cracking of the product exterior or the panel surface coming off, be sure to use the recommended cleansing agent only.

You can purchase the recommended cleansing agent from a service center.



Before cleaning the product, unplug the power cord.

- Otherwise, it may result in electric shock or fire.

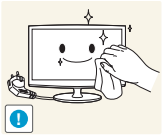
When cleaning the product, do not spray water directly over the product parts.

- Make sure that water does not enter the product.
- Otherwise, it may result in fire, electric shock or a problem with the product.

Caution

Avoid spraying cleansing agent directly onto the product.

- This may result in discoloration or cracking of the exterior of the product or the panel coming off.



When cleaning the product, disconnect the power cord and clean the product with a soft dry cloth.

- Avoid using chemicals such as wax, benzene, alcohol, thinner, mosquito-repellent, fragrance, lubrication or cleansing agent when cleaning the product.

  This may result in the exterior being deformed or the print being removed.

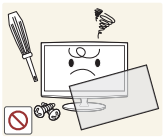
Use a soft, cloth dampened with a "monitorexclusive cleansing agent" and wipe the product with it.

- If no monitor-exclusive cleansing agent is available, dilute a cleansing agent with water at a ratio of 1:10 before cleaning the product.

Because the exterior of the product is easily scratched, be sure to use a proper cleansing cloth. However, if the cloth is contaminated by alien substances, it may result in scratches to the exterior; therefore shake off any alien substances from the cloth before using it.

Usage Related

Warning



Since a high voltage runs through the product, never disassemble, repair or modify the product yourself.

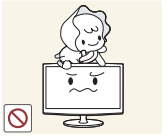
- Otherwise, it may result in fire or electric shock.
- If the product needs to be fixed, contact a service center.

When cleaning the product, do not spray water directly over the product parts.

- Make sure that water does not enter the product.
- Otherwise, it may result in fire, electric shock or a problem with the product.

If the product generates a strange noise, a burning smell, or smoke, unplug the power plug immediately and contact a service center.

- Otherwise, it may result in electric shock or fire.



Avoid letting children to hang or climb onto the product.

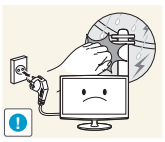
- Otherwise, it may result in the product falling and this may result in injury or death.

If you drop the product or the case is damaged, turn the power off and unplug the power cord. Contact a service center.

- Otherwise, it may result in fire or electric shock.

Avoid placing objects such as toys and cookies on top of the product.

- If a child hangs over the product to grab an object, the object or the product may fall and this may result in injury or even death.



When thunder or lighting occurs, unplug the power cord and under no circumstance touch the antenna cable as this is dangerous.

- Otherwise, it may result in electric shock or fire.

Avoid dropping an object over the product or cause impact to the product.

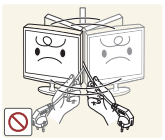
- Otherwise, it may result in electric shock or fire.

Avoid moving the product by pulling the power cord or antenna cable.

- Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.

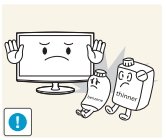
When a gas leak occurs, do not touch the product or the power plug and ventilate immediately.

- A spark may result in an explosion or fire.
- During a thunder or lighting storm, do not touch the power cord or antenna cable.



Avoid lifting up or move the product by holding only the power cord or signal cable.

- Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.



Avoid using or placing inflammable spray or objects near the product.

- This may result in an explosion or fire.

Take care not to block the vent by a table cloth or curtain.

- Otherwise, it may result in fire due to internal overheating.

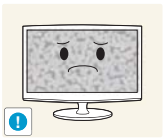
Avoid inserting metal objects such as a chopsticks, coins or hairpins, or inflammable objects into the product (the vents, ports, etc).

- If water or an alien substance enters the product, turn the power off, unplug the power cord and contact a service center.
- Otherwise, it may result in a problem with the product, electric shock or fire.

Avoid placing a liquid container such as a vase, flowerpot, beverage, cosmetics or drugs, or a metal object over the product.

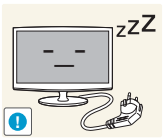
- If water or an alien substance enters the product, turn the power off, unplug the power cord and contact a service center.
- Otherwise, it may result in a problem with the product, electric shock or fire.

Caution



Displaying a still image for a long time may create a persistent image or stain on the screen.

- If you do not use the product for a long time, use the power-saving mode or set the screensaver to the moving picture mode.

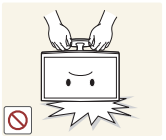


When not using the product for a long time such as leaving your home, unplug the power cord from the wall outlet.

- Otherwise, it may cause dust accumulation and result in fire caused by overheating or short circuit or result in an electric shock.

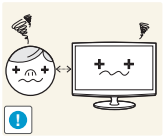
Set the appropriate resolution and frequency for the product.

- Otherwise, it may result in eye strain.



Avoid turning the product upside down or moving the product holding only the stand.

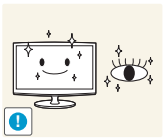
- This may cause the product to fall resulting in damage to the product or injury.



Watching the product from too close a distance continuously may damage your eyesight.

Avoid using a humidifier or cooker near the product.

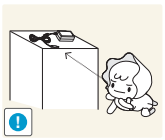
- Otherwise, it may result in electric shock or fire.



It is important to give your eyes some rest (5 minutes every hour) when viewing the product screen for long periods of time.

- This will alleviate any eye strain.

Since the display panel is hot after being on for a long time, do not touch the product.



Keep small accessories away from the children.

Take care when adjusting the angle of the product or the height of the stand.

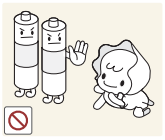
- If your hand or finger is caught, you may be injured.
- If the product is tilted excessively, the product may fall and this may result in injury.

Avoid placing a heavy object over the product.

- Otherwise, it may result in a problem with the product or injury.

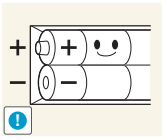
When using headphones or earphones, do not turn the volume too high.

- Having the sound too loud may damage your hearing.



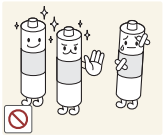
Be careful that children do not place the batteries in their mouths when removed from the remote control. Place the battery in a location that children or infants cannot reach.

- If children have had the battery in their mouths, consult your doctor immediately.



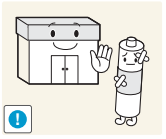
When replacing the batteries, insert them with right polarity (+, -).

- Otherwise, the battery may become damaged or it may cause fire, personal injury or damage due to leakage of the internal liquid.



Use only specified standard batteries. Do not use new and used batteries together.

- This may cause a battery to break or leak and may cause fire, injury, or contamination (damage).



The batteries (and rechargeable batteries) are not ordinary refuse and must be returned for recycling purposes. The customer is responsible for returning the used or rechargeable batteries for recycling.

- The customer can return used or rechargeable batteries to a nearby public recycling center or to a store selling the same type of the battery or rechargeable battery.

Maintaining the Correct Posture when Using this Product

Maintain the correct posture when using this product.

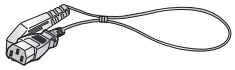
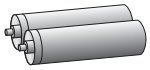
- Straighten your back.
- Keep a distance of 45~50 cm from your eyes to the screen. Look down at the screen and face the screen forwards.
- Maintain the correct posture when using this product.
- Adjust the angle of the product so that light is not reflected onto the screen.
- Keep your elbow at a right angle and keep your arm level with the back of your hand.
- Keep your elbow at a right angle.
- Place your heels flat on the ground while keeping your knees at an angle of 90 degrees or higher and maintain the position of your arm so that your arm is below your heart.

2 Installing the Product

2-1 Package Contents

- Unpack the product and check if all of the following contents have been included.
- Store the packaging box in case you need to move the Product later.
- If any items are missing, contact your dealer.
- Contact a local dealer to purchase optional items.

Monitor

CONTENTS			
			
Installation Manual	Product Warranty	User Manual	Power Cord
			
D-Sub Cable	LAN Cable	Remote Control	Batteries (AAA X 2) (Not available in all locations)
DVI Cable	Ferrite Core for LAN cable	Stereo Cable	Cleaning Cloth

The cleaning cloth is supplied with black high-glossy models only.

2-2 Installing the Stand

Before attaching the stand, place a soft cloth on a flat, stable surface, and then place the product onto the cloth so that the screen is facing downwards.

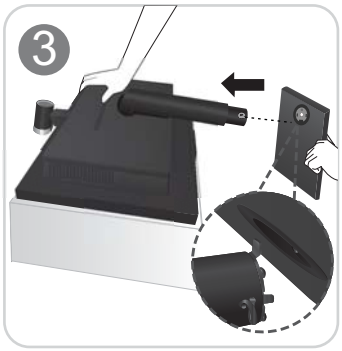
Caution: When placing the product on a flat surface, you can damage the projection on the camera. To prevent damage, place the monitor down gently and carefully.

Place a soft cloth over a flat, sturdy table, and then place the product onto the cloth so that the screen is facing downwards.

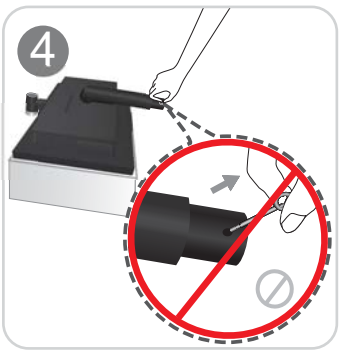
Turn the stand in the direction indicated by the arrow.

Do not remove the stopper pin before installing the base.

Make sure that the stand has been properly turned in the right direction.

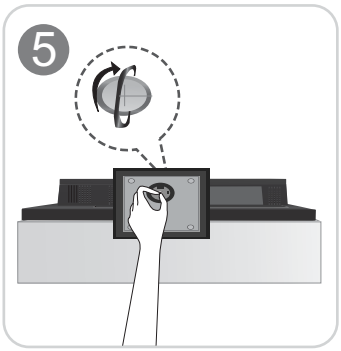


Push the base into the product's stand in the direction indicated by the arrow.



Do not remove the stopper pin before completely installing the stand's base.

Otherwise it may cause physical injury.



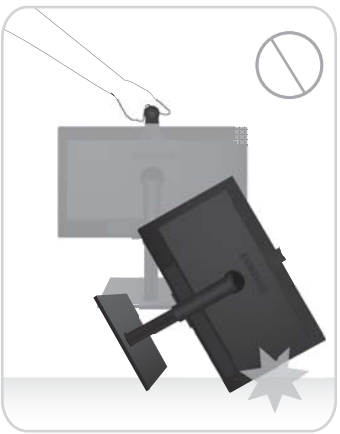
Turn the connecting screw at the bottom of the stand fully so that it is completely fixed.

After installation of the base is complete, stand the product up.

- Remove the stopper pin.
- Adjust the height of the screen to your specifications.

- Caution

Avoid lifting the product holding only the stand.



- Caution

Avoid moving the product only holding it by the camera.

Disassembly is in the reverse order of assembly.

2-3 Removing the Stand

Before removing the stand, place a soft cloth on a flat, stable surface, and then place the product onto the cloth so that the screen is facing downwards.

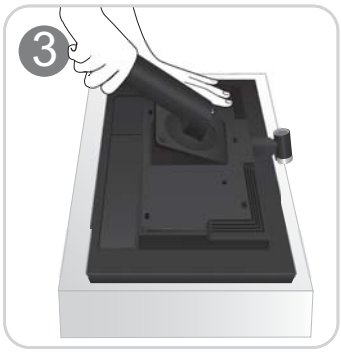
Caution: When placing the product on a flat surface, you can damage the projection on the camera. To prevent damage, place the monitor down gently and carefully.

Place a soft cloth over a table to protect the product, and then place the product onto the cloth so that the front of the product is facing downwards.

Hold the product's stand as shown in the picture, and then detach the rear cover.

Unfasten the screws indicated as "A."

The stand can be detached after removing the screws.

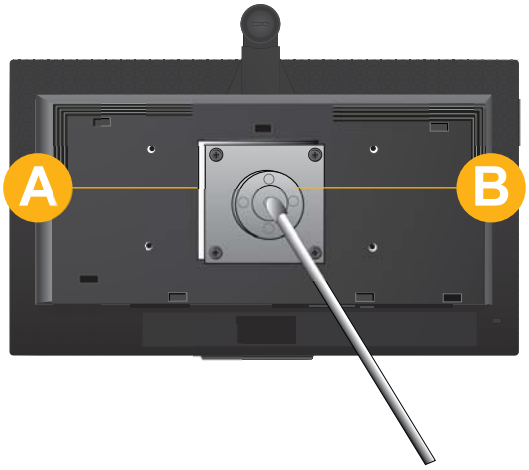


Hold the main body of the product as shown in the picture.

Lift and separate the unscrewed stand.

2-4 Installing a VESA Wall Mount or Desk Mount

This product has a 100 mm x 100 mm / 200 mm x 100 mm VESA compatible stand mount.



A. Stand Mount

B. Stand (Optional)

To attach a VESA compatible wall mount, follow these steps:

1. Turn the product off, and the unplug the power cord from the wall outlet.
2. Place a soft cloth or cushion on a flat surface to protect the panel and place the product face down on the cloth or cushion.
3. Detach the rear cover.
4. Remove the stand as described previously.
5. Align the groove of the part of the product that is to be connected to the stand with the groove in the stand (desk-top stand, wall mount stand or another stand) and firmly fix the stand by fastening the screw.

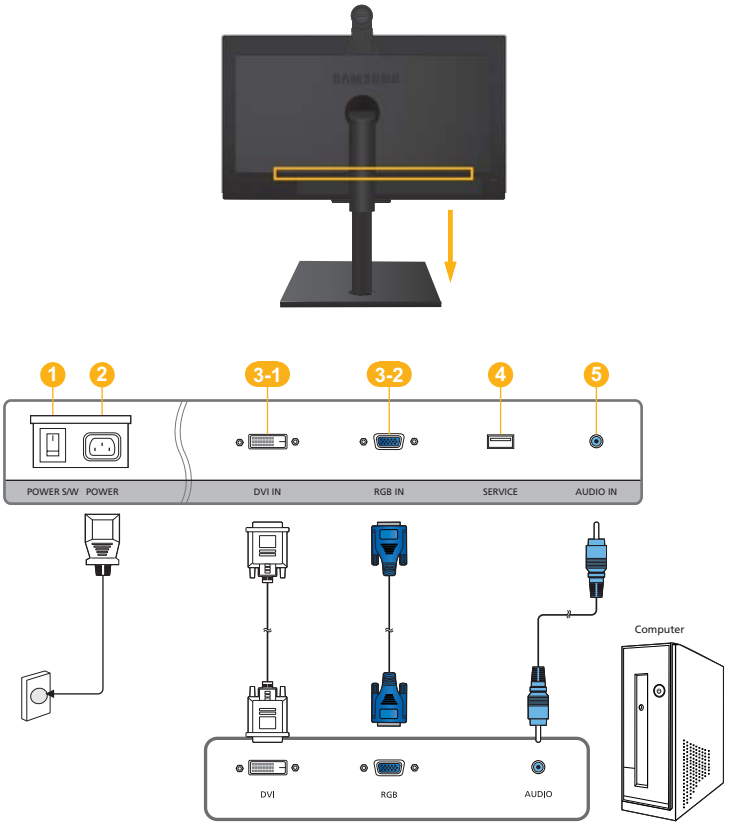
- If you use a screw that is longer than the standard specifications, the inside of the product may be damaged.
- For wall mounts that are not compatible with the standard VESA specifications, the length of the screw may differ depending on the corresponding specifications.
- Do not use screws that are incompatible with the standard VESA specifications and do not screw them in using excessive force.

  This may result in damage to the product or injury due to the product falling.

  The company shall not be held liable for any damage or injury.
- Samsung shall not be held liable for any damage to the product or injury caused by using a stand that is not compatible with the specified specifications or due to an installation not performed by an authorized installation engineer.
- When installing the product using a wall mount, purchase a wall mount that provides at least 10 cm of clearance from the wall.
- Samsung shall not be held liable for any problems caused by using a stand that is not compatible with the specified specifications.
- Use the wall mount according to the specifications of your country.

2-5 Connecting with a PC

The connecting parts may differ depending on the product model.



- Connect the monitor to your PC as illustrated when you intend to use the monitor as a computer display only, and do not intend to use the video call function.
- To connect the monitor and use it as a computer display only, follow these steps:

1. POWER S/W : Turns the product on and off.
2. Connect one end of the power cord to the [POWER] port of the product and connect the other end of the power cord to the 220V or 110V wall outlet.

   The monitor recognizes the input voltage and switches automatically.

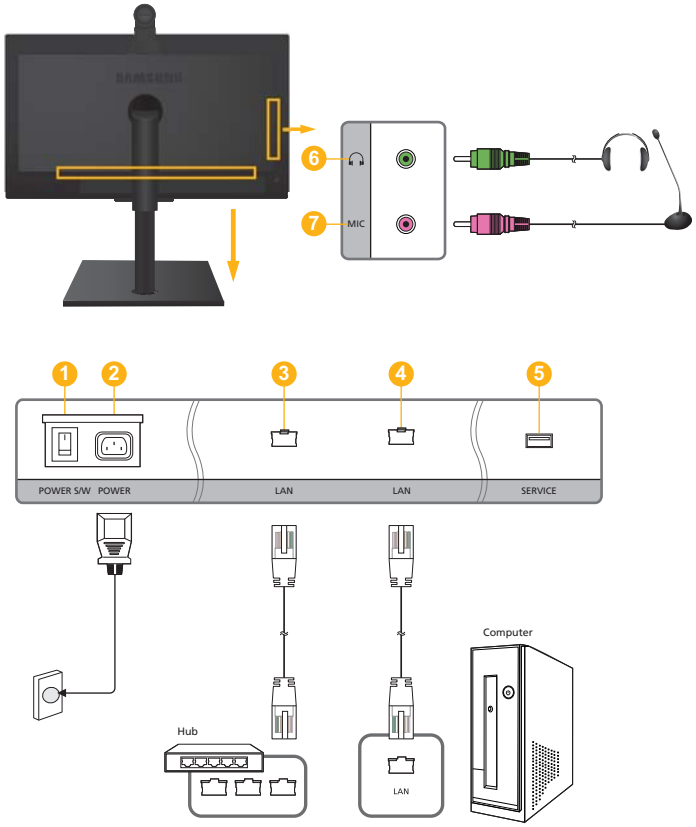
3. Connect the product to a PC depending on the video output supported by the PC.
   - **3-1.** When the graphics card provides DVI (Digital) output
     Connect the [DVI IN] port of the product to the DVI port of the PC with the DVI cable.
   - **3-2.** When the graphics card provides D-Sub (Analog) output
     Connect the [RGB IN] port of the product to the [RGB IN] port of the PC with the D-Sub cable.
4. SERVICE : Dedicated to A/S
5. Connect the [AUDIO IN] port on the rear side of the monitor to the sound card of the PC.

After the product is connected to a PC, you can turn the product on and use it.

When both the DVI (<DVI>) and D-Sub (<PC>) cables are connected, you can select the input signal <PC or DVI> by pressing the [↵/SOURCE] button.

2-6 Connecting to the Video Conference Monitor

The connecting part may differ depending on the product model.



- Connect the monitor to your PC as illustrated when you intend to use the monitor as a computer display and to send and receive video calls or participate in video conferences.
- Ensure that only one of the two [LAN] ports is connected to the network using a LAN cable.

To connect the monitor to your PC and use it as a computer display and for video calls and video conferences, follow these steps:

1. POWER S/W : Turns the product on and off.
2. Connect one end of the power cord to the [POWER] port of the product and connect the other end of the power cord to the 220V or 110V wall outlet.

   The monitor recognizes the input voltage and switches automatically.

3. Connect between the [LAN] port on the product and your network using a LAN cable.
4. Connect the LAN cable between the [LAN] port on the product and the [LAN] port on your PC.

   You do not have to connect the monitor to a PC to make video calls.

   When using the same IP for both the PC and the Video Conference Monitor, you must connect the LAN cables as shown above.

5. SERVICE : Dedicated to A/S
6. Connect the headphone cable to the headphone port on the product.

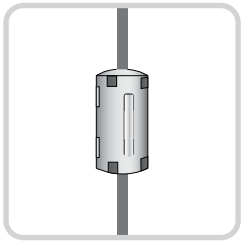
   Connect it only when needed, since this product has an internal speaker.

7. Connect the microphone cable to the microphone port on the product.

   Connect it only when needed, since this product has an internal microphone. Note that it can only be used for a video call.

Once the connection is finished, turn on the power and press the [↵ /SOURCE] button to select <VC> as the input signal.

Ferrite Core

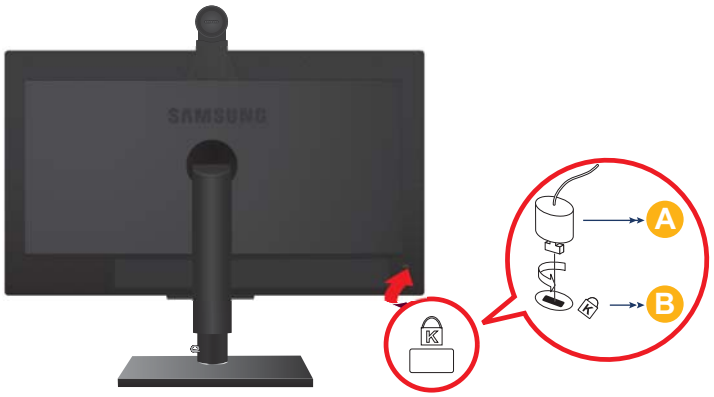


- The ferrite cores are used to shield the cables from interference.
- When connecting a cable, open the ferrite core and clip it around the cable near the plug.

2-7 Kensington Lock

A Kensington Lock is an anti-theft device that enables users to lock the product so that they can safely use it in public locations. Since the shape and usage of the locking device may differ depending on the model and the manufacturer, for more information, refer to the User Manual supplied with the locking device for more information.

You must purchase the Kensington Lock separately.



To lock the product, follow these steps:

1. Wrap the Kensington lock cable around a large, stationary object such as a desk or chair.
2. Slide the end of the cable with the lock attached through the looped end of the Kensington lock cable.
3. Insert the locking device into the Kensington slot on the Monitor (B).
4. Lock the lock (A).

- These are general instructions. For exact instructions, see the User Manual supplied with the locking device.
- You can purchase the locking device from an electronics store, an online shop, or our service center.

3 Using the product

3-1 System Warm-up

A 30-second stand-by time is required after you turn the product on.

- The Initializing System graphic appears each time you turn the product on.
- If you want to receive a video call without turning the product off, set <Standby> and <Max. Power Saving> to on.

3-2 Standard Signal Mode Table

- If you select one of the standard Display Modes listed below (for example, 800 x 600 or 1440 x 900), your monitor will automatically adjust your screen to the correct Horizontal and Vertical frequency. However, if you attempt to use a non-standard Display Mode, the screen may go blank even though the power LED indicates the monitor is on.
- The optimum Display Mode for this monitor is 1920 x 1080 with a refresh rate of 60 Hz.If you select a Display Mode of 1920 x 1080, your monitor will automatically adjust your screen to the correct Horizontal and Vertical frequency.
- For best visual quality, set the resolution of your monitor to its optimum resolution.

DISPLAY MODE	HORIZONTAL FREQUENCY (KHZ)	VERTICAL FREQUENCY (HZ)	PIXEL CLOCK (MHZ)	SYNC POLARITY (H/V)
IBM, 640 x 350	31.469	70.086	25.175	+/-
IBM, 720 x 400	31.469	70.087	28.322	-/+
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	57.284	-/-
MAC, 1152 x 870	68.681	75.062	100.000	-/-
VESA, 640 x 480	31.469	59.940	25.175	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 x 800	49.702	59.810	83.500	-/+
VESA, 1280 x 800	62.795	74.934	106.500	-/+
VESA, 1280 x 960	60.000	60.000	108.000	+/+
VESA, 1280 x 1024	63.981	60.020	108.000	+/+
VESA, 1280 x 1024	79.976	75.025	135.000	+/+
VESA, 1440 x 900	55.935	59.887	106.500	-/+
VESA, 1440 x 900	70.635	74.984	136.750	-/+
VESA, 1600 x 1200	75.000	60.000	162.000	+/+
VESA, 1680 x 1050	65.290	59.954	146.250	-/+
VESA, 1920 x 1080	67.500	60.000	148.500	+/+

Horizontal Frequency

The time taken to scan one line from the left-most position to the right-most position on the screen is called the horizontal cycle and the reciprocal of the horizontal cycle is called the horizontal frequency. The horizontal frequency is represented in kHz.

Vertical Frequency

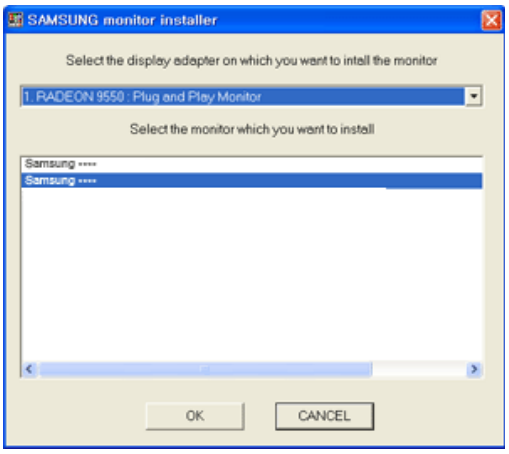
A panel must display the same picture on the screen tens of times every second so that humans can see the picture. This frequency is called the vertical frequency. The vertical frequency is represented in Hz.

3-3 Installing the Device Driver

- The device driver is included on the CD-ROM supplied with the product. If the supplied driver file is corrupted,you can download the monitor driver by clicking Support > Downloads at http://www.samsung.com, and then following the directions on the web site.
- After you have downloaded the driver file, double click the file, and then follow the directions that appear on your screen.

To install the driver, follow these steps:

1. Insert the driver installation CD-ROM into the CD-ROM drive.
2. Click "Windows Driver".
3. Select the model of your product from the model list.


SAMSUNG monitor installer
Select the display adapter on which you want to intall the monitor
1. RADEON 9550 : Plug and Play Monitor
Select the monitor which you want to install
Samsung ****
Samsung ****
OK
CANCEL

4. Complete the remaining installation steps according to the instructions displayed on the screen.
5. Check if the appropriate resolution and screen refresh rate are displayed in the Display Properties. For more information about the Display Properies dialog, refer to Widnows operating system documentation.

3-4 Product Operating Buttons

Product Information

You can use your monitor as a standard monitor or as a Video Call monitor. The Video Call functions are built into the monitor.

Some functions may not operate when using the product as a monitor, since they are designed only for the video call function.

	ITEM	DESCRIPTION
1	Camera	Receives and transmits images during a video call.
2	Microphone	Inputs sound during a video call.
3	Remote control sensor	Receives signals from the remote control.
4	Speaker	Outputs sound from the remote party during a video call. Outputs sound from the PC when the product is connected to a PC by an audio cable.

Product Operating Buttons

The buttons are located on the bottom of the monitor.

ICON	DESCRIPTION
MENU/	Press this button to view the On Screen Display (OSD). This button is also used to exit the OSD or to return to a higher-level OSD menu
▼/▲	Use these buttons to navigate the menu or to adjust a value in the OSD.
	Use this button to dial a video call.
	Allows you to mute either the voice or video, or both the voice and video, according to the current OSD settings (<Settings> → <Mute Option>).
◄ VOL ►	Use these buttons to navigate the menu or to adjust a value in the OSD. When OSD is not on the screen, push these buttons to adjust volume.

ICON	DESCRIPTION
↵/SOURCE	If the OSD is on the screen, use this button to select a function When the OSD is not on the screen, use this button to switch the input signal (PC/DVI/VC). When you switch the input signal by pressing the [↵ /SOURCE] button or when you turn the product on, a message displaying the selected input signal appears at the top left of the screen. ✎ To select the <PC/DVI> mode, the product must be connected to the graphics card on the PC using the D-SUB (PC) cable or DVI-D (DVI) cable.
⏻	Press this button to turn the product on or off.
Power LED	This LED is turned on when the product works normally. The power LED can be found above the buttons on the bottom of the monitor. ✎ For information about the power-saving function, refer to the power saving function section of the product specifications. When not using the product for a long time, unplugging the power cord is recommended to minimize power consumption.

3-5 Video Conferencing Features with RADVISION SCOPIA Infrastructure

You can use the VC240 by itself for High Definition point to point video calls.

But that's not all. You can enjoy additional features such as centralized management, multi-party conferencing, recording and streaming, and firewall traversal by adding a video conferencing infrastructure with RADVSION SCOPIA .

RADVISION SCOPIA is a family of infrastructure products delivered as network appliances and software, optimized to work with your VC240.

Using RADVISION SCOPIA, you can quickly deploy a scalable visual communication network and centrally manage the video network, enable multiparty meetings and extend video conferencing to any laptop across any firewall.

Multi-Party (Multipoint Conferencing)

Video communication with the VC240 can be more effective and efficient with Multipoint (Multi-Party) Conferencing. This is where more than two participants connect simultaneously.

With Multipoint conferencing, VC240 users can see and hear several other participants and feel as they are all in the same location – in a “virtual conference room” on the network so to speak.

Multi-Party Call

Point-to-Point Call

Multipoint Conferencing is accomplished with an MCU (Multipoint Conferencing Unit) which is a device that manages a multipoint conference by connecting multiple sites into the same video conference.

RADVISION’s SCOPIA Elite MCU offers 1080p High Definition processing, and personal layouts for each participant.

You, along with other participants, control SCOPIA Elite conferences with the VC240 remote control and perform such actions as muting participants, changing video layouts, and inviting other endpoints to the conference.

High End Desktop Video Conferencing

Managers and executives who are using the VC240 for their video calls want ways to extend video conferencing easily to large numbers of remote and desktop users and make communications more efficient, easier, and broader in reach.

RADVISION's SCOPIA Desktop allows users to take conferencing wherever they go.

SCOPIA Desktop is designed to meet the demands of high performance video conferencing with a standard PC and Internet connection.

It includes the latest in video technology, providing HD H.264 for viewing both meeting participants and data collaboration.

Its audio system provides echo cancellation, background noise suppression, and is highly resistant to network errors common on the Internet.

SCOPIA Desktop is a simple web browser plug-in that is centrally managed and deployed on a PC without complex licensing fees or installation issues.

Simply click on a link and include tele-workers in meetings, participate in video conferences from the road, collaborate with partners and suppliers, and seamlessly connect through firewalls.

Video Network Management

VC240 system administrators and users can be significantly more effective when using a central management system to perform operations such as remote software upgrades, system configuration, monitoring, and operation.

As the number of VC240 systems grows in a deployment, a central management system can make administrators significantly more efficient at managing distributed VC240 systems from a single point.

RADVISION's iVIEW Suite is the perfect solution for this requirement.

iVIEW Suite provides a comprehensive management solution for voice and video collaborative communications.

With iVIEW, a video network can be efficiently managed and monitored to ensure efficient bandwidth utilization.

Meetings can also be easily scheduled and managed, delivering a high quality video communications experience.

Conference Recording and Streaming

Conference Recording can also be enabled through RADVISION’s SCOPIA solution.

The recording feature captures audio, video, and data, preserving meetings in High Definition for future playback.

VCR style controls are available to provide access to any portion of the recording.

RADVISION’s SCOPIA additionally enables integrated streaming for conference webcasting to both PC and Mac based participants.

This allows viewers to see both the speaker’s and the presentation content's video streams. Simultaneous unicast and multicast support extends the meeting to a virtually unlimited number of participants.

Firewall Traversal and NAT Solution

Firewalls are barrier devices placed between two separate networks that filter out unwanted packets, in many cases unintentionally blocking video conferencing traffic.

Many firewalls also combine filtering functionality with Network Address Translation (NAT) capability and are usually located at the border of the network they protect.

The SCOPIA PathFinder Firewall and NAT Solution enables secure connectivity between enterprise networks and remote sites.

SCOPIA PathFinder maintains the security and advantages of Firewall and NAT over video networks and allows seamless integration with existing video endpoints and infrastructure.

Learn More

To learn more on how RADVISION SCOPIA can help your VC240 deployment, please visit http://www.radvision.com/VC240 or contact your regional RADVISION office.

USA/AMERICAS	EMEA	APAC
T +1 201 689 6300	T +44 20 3178 8685	T +852 3472 4388
F +1 201 689 6301	F +44 20 3178 5717	F +852 2801 4071
infoUSA@radvision.com	infoUK@radvision.com	infoAPAC@radvision.com

3-6 Remote Control

TV's or other electronic devices near the monitor can affect the performance of the remote control by interferring with the signal the remote uses to transmit to the monitor,

1 POWER

Turns the product On/Off.

2 SOURCE

Switches the input signal. (PC/DVI/ VC)

3 LAYOUT

Allows you to select a variety of screen splits by pressing this button repeatedly. Activates PIP function.

4 + ZOOM-

Allows you to zoom in and/ or out on the camera of the remote party whose camera supports the ZOOM function.

(This product does not support the ZOOM function)

5 ▲▼◀▶ Up-Down Left-Right buttons

OK MENU Confirmation

Moves from one menu item to another horizontally, vertically or adjusts selected menu values.

6

Allows you to select the camera you want to zoom in/ out on.

- Near End : Your camera
- Far End : Remote party's camera

7 PRESENTATION

Determines whether or not to perform the function that sends your PC screen to the remote party.

8 INFO

<PC/DVI> : Shows the resolution.

<VC> : Shows detailed information on the current connection.

11 Special Characters

Allows you to input '*' and '.' alternately by pressing this button repeatedly.

12 1/A/a

Allows you to change the mode on the text input window (Number → Capital → Lowercase).

13 MIC MUTE

Allows you to mute either the voice or video, or both the voice and video, according to the current OSD settings (<Settings>→ <Mute Option>).

14 ∧ VOL ∨

Press to increase or decrease the volume.

15

Mutes the sound from the remote party while a call is being connected.

(Your sound is transmitted)

16 SETUP

This is the shortcut key to the <Settings> menu.

17 BACK

Returns to the previous menu.

Deletes text during text input.

18 END

Ends a video call.

19 Special Characters

Allows you to input '#', '@' and ':' alternately by pressing this button repeatedly.

20 PHONE BOOK

Displays the phone book on the screen.

9 CALL

Dials a video call.

10 Number Buttons

Allows you to input numbers and text according to the input mode.

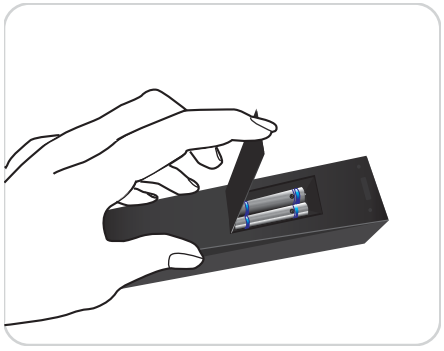
21 HOLD

Allows you to hold the current call (while staying connected) to speak with someone else.

This function will be available later.

Installing Batteries in the Remote Control

1. Open the cover on the back of the remote control as shown in the picture.



2. Install two AAA size batteries.

   Make sure to match the + and - ends of the batteries with the diagram inside the compartment.

3. Close the cover.

   Remove the batteries and store them in a cool, dry place if you won‘t be using the remote control for a long time.

   If the remote control doesn‘t work, check the following :

   - Is the TV power on?
   - Are the plus and minus ends of the batteries reversed?
   - Are the batteries drained?
   - Is there a power outage or is the power cord unplugged?
   - Is there a special fluorescent light or neon sign nearby that is disrupting the remote's transmissions?

3-7 LAYOUT Modification

The VC mode displays a video call screen in full screen.

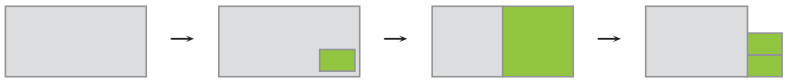
You can change the video call layout using the 'LAYOUT' button on the remote control.

The video call LAYOUT is represented below as a combination of your screen (self camera screen), the remote party's screen (remote screen), and the PC/DVI screen. The colors representing each screen are listed below:

- : PC/DVI
- : Self camera screen
- : Remote screen

PC/DVI Mode

- When the connection has failed

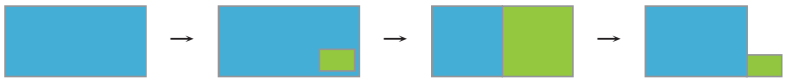


- When the line is busy

VC Mode

- When the connection has failed

- When the line is busy



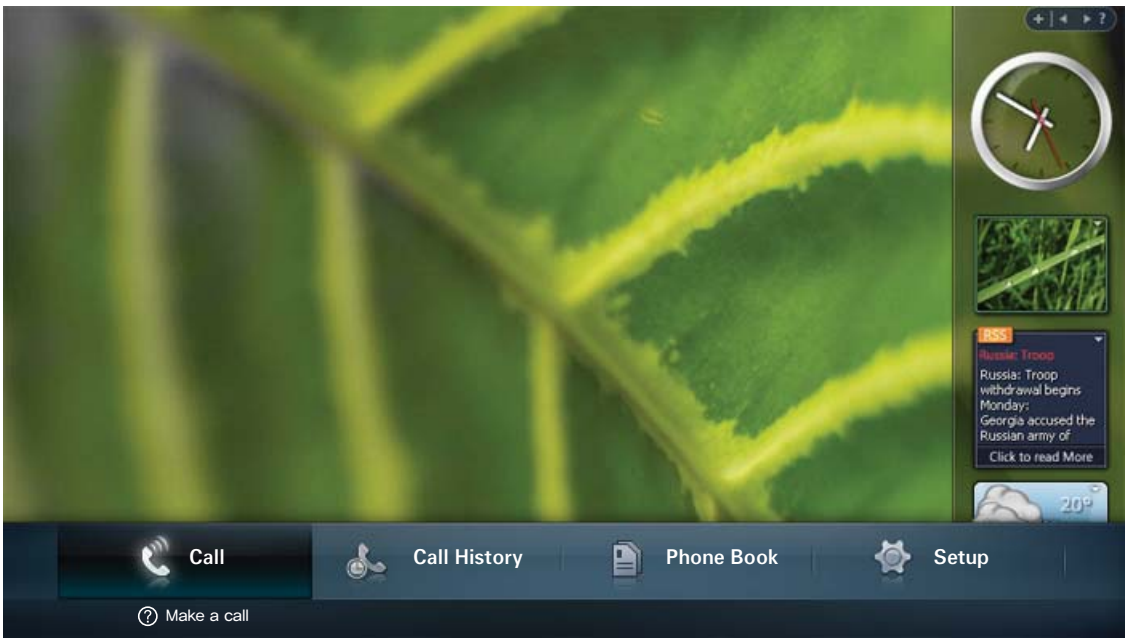
The LAYOUT settings saved in <PC/DVI> modes (PC and DVI modes share the same settings) are not applied to the layout of <VC> mode.

3-8 Using the Screen Adjustment Menu (OSD: On Screen Display)

The Screen Adjustment Menu (OSD: On Screen Display) Structure

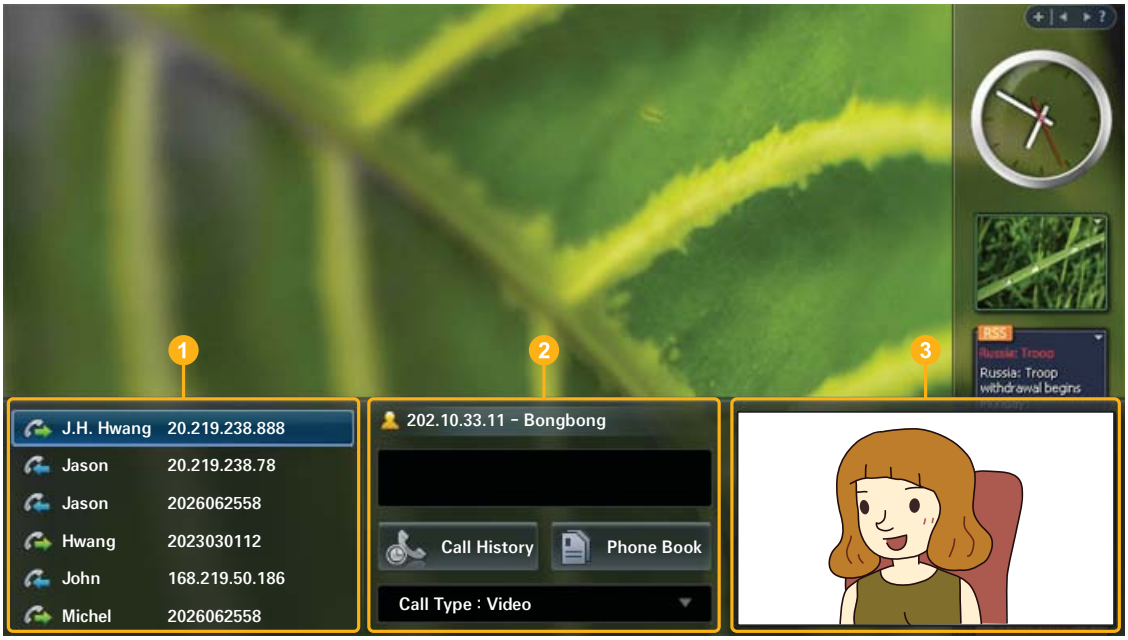
MENU			
Call	Call history	Phone book	Settings

Pressing the " OK MENU " button on the remote control or the MENU button on the front of the product in the PC(DVI) input mode or VC (Video Conference) mode will displays the V2oIP (Voice and Video over Internet Provider) main menu on the bottom of the screen as shown below.



Call

Appears when you press the CALL button on the remote control. Used for dialing a video call.



1. Call list : Shows the list of incoming and outgoing calls.

   <Name> and <IP> are both displayed for contacts registered in the <Phone Book>.

   Only <IP> is displayed with <Name> left blank for contacts not registered in the <Phone Book>.

2. Dialing a call : Depending on whether a SIP server or gate keeper is used, you can make a call by entering an IP, ID or E.164 number.

   2-1. Current status view : The icon is displayed in yellow or gray according to the corresponding server's log-on status if a SIP server or gate keeper is used. Depending on the status of the network, it is displayed in either yellow or gray if the server is not used.

   2-2. Telephone number input : Pressing the "CALL" button on the remote control after entering the remote party's <IP>, <SIP ID> or E.164 number will dial a call.

   <SIP ID> allows you to use the IDs of users who have logged on through a SIP server, while the E.164 number allows you to use the numbers of users who have logged on through a gate keeper.

   2-3. Call Type : Allows you to select either between <Video> call and <Voice> call.

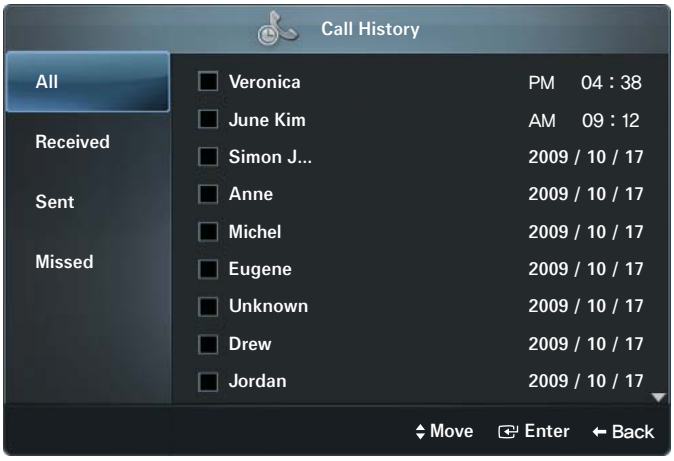
3. Self camera screen : The self camera screen will be displayed when offline. Allows you to display a list of the currently connected users and cancel a connection while on the line.

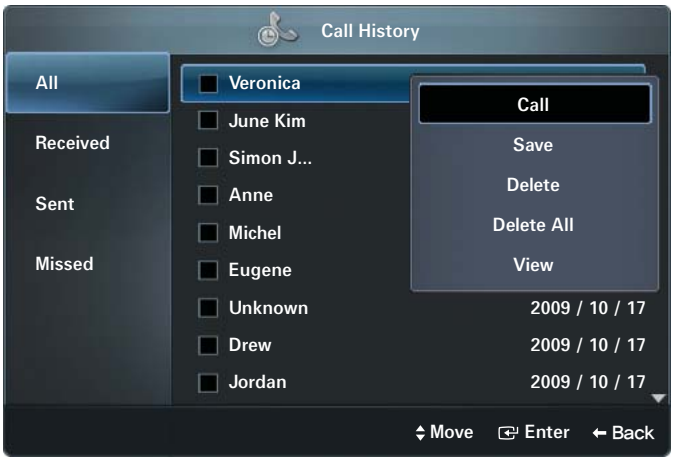
Call history

Displays the recent call list for <Received>, <Sent> and <Missed> calls.

The registered <Name> and the time of last call are displayed for an <IP> saved in the <Phone Book>. <IP> and the time of last call are displayed for an <IP> that was not saved.

The exact time (AM/PM) is displayed for calls made on the current day, and the date is displayed for calls made on previous days.


Call History
All
Received
Sent
Missed
Veronica PM 04 : 38
June Kim AM 09 : 12
Simon J... 2009 / 10 / 17
Anne 2009 / 10 / 17
Michel 2009 / 10 / 17
Eugene 2009 / 10 / 17
Unknown 2009 / 10 / 17
Drew 2009 / 10 / 17
Jordan 2009 / 10 / 17
Move Enter Back



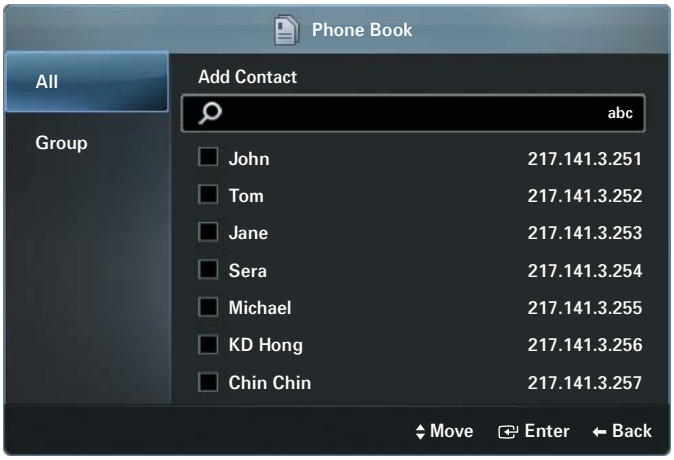
Viewing Sub-menus

1. <Call> : Dials a call using call information.
2. <Save> : Allows you to save information or edit saved information in the <Phone Book>.
3. <Delete> : Deletes certain items from the list.
4. <Delete All> : Deletes all of the items from the list.

5. <View> : Allows you to view detailed call records.
6. <Unselect All> : Deselects a list.

Phone book

Pressing the PHONE BOOK button on the remote control will display <Phone book>.



MENU	DESCRIPTION
All	Allows you to browse, add, edit and/ or delete a user. Search a user according to <Name>, <SIP ID>, <IP> or <Call Number> depending on the server settings. Add a user by selecting <Add Contact> and setting <Name>, <IP>, <SIP ID>, <Call Number> and <Group>.
Group	Allows you to add, edit and/ or delete a group. Selecting a group and pressing the " OK MENU " button on the remote control will display the list of users under that group. Select <Add Group> to add a group. If a user is not in a group, you can add the user to any group using the <[Unassigned]> menu.

Settings

Pressing the SETUP button on the remote control will display the <Settings> menu.

TOP MENUS	SUB MENUS				
General	Language	Clock	Standby	Max. Power Saving	Security
	SW Upgrade	Reset System	SW version	Open Source	
Call Control	Auto Answer	Mute Option	Do not Disturb	Default Call Type	Call Quality
Input	Source List	PIP Size	PIP Position	PIP Transparency	
Picture [PC/DVI]	MagicBright	Contrast	Brightness	Sharpness	Auto Adjustment
	Screen	Picture Option	Picture Reset		
Picture [VC]	Mode	Contrast	Brightness	Sharpness	Color
	Tint (G/R)	Picture Option	Picture Reset		

TOP MENUS	SUB MENUS				
Network	IP Settings	User Name	Phone Number	Network Preference	H.323 Settings
	SIP Settings	Network Test			
Audio	Sounds				
Camera	Power Frequency	White Balance	Brightness	Flip	

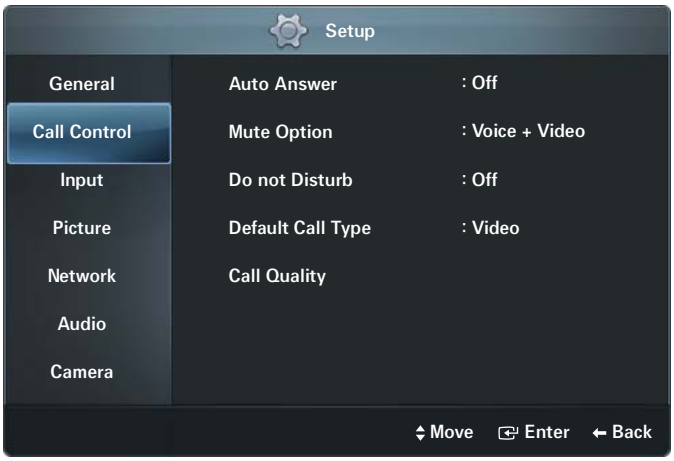
General Menu

PC / DVI	VC

MENU	DESCRIPTION
Language	Select a language for the OSD. • <English> - <Français> - <Italiano> - <Español> - <Deutsch> - <한국어> - <日本語> The selected language is only applied to the product OSD. This setting does not affect the other functions of the PC.
Clock	Allows you to set the current date and time for your system. • <Clock Set> - Allows you to set <Year>, <Month>, <Day>, <Hour>, <Minute> and <AM/PM>. • <Date Format> - Customize the date display format. <YYYY/MM/DD> - <MM/DD/YYYY> - <DD/MM/YYYY> • <Time Format> - Customize the <Time Format>. <12 hours> - <24 hours>
Standby	Displays the stand-by time for the active system in <VC> mode. The standby time is the amountt of time the panel can be left idle before it turns off automatically. • <Now> - <Off> - <10 min> - <20 min> - <30 min> - <60 min> <Standby> is disabled while on the line.
Max. Power Saving	This is a power-saving function which is active in <PC/DVI> mode. If the PC enters the power-saving mode when the <Max. Power Saving> is <On>, then the product will also enter the power-saving mode. • <On> - <Off> Making a call is impossible in power saving mode if <Max. Power Saving> is set to <On>.

MENU	DESCRIPTION
Security	Creates a user password with a four-digit number. • <Functions Lock> - <Change PIN> The default password is 0000.
SW Upgrade	Updates your software through the network. Disabled while on the line.
Reset System	Returns the product to its factory settings. Disabled while on the line.
SW version	Checks the software version of the current system.
Open Source	Shows the software used in developing this product.

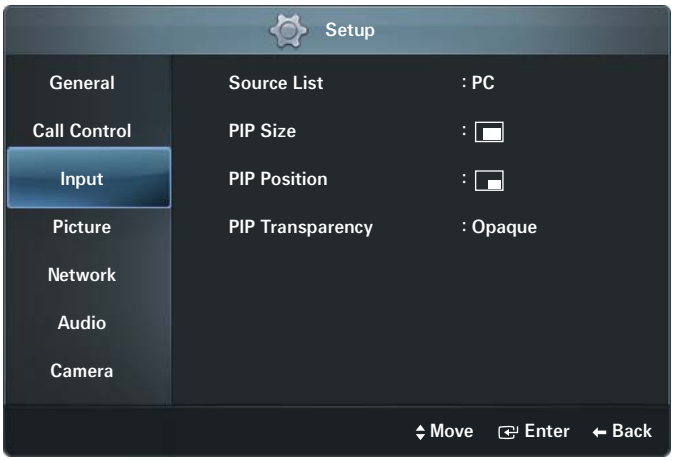
Call Control Menu



MENU	DESCRIPTION
Auto Answer	Automatically answers an incoming call. • <On> - <Off> Disabled while on the line.
Mute Option	Lets you select the desired <Mute Option> while on the line. • <Voice> - Stops transmitting microphone input to the remote party. • <Video> - Stops transmitting image input to the remote party. • <Voice + Video> - Stops transmitting image and microphone inputs to the remote party.
Do not Disturb	Automatically rejects an incoming call. • <On> - <Off> Disabled while on the line.

MENU	DESCRIPTION
Default Call Type	Selects a desired call type. • <Video> - <Voice>
Call Quality	• <Video Mode> - Gives priority to picture quality and frame rate. • <Sharpness> - Gives priority to frame rate over picture quality during communication. • <Motion> - Gives priority to picture quality over frame rate during communication. • <Max Bandwidth> - Allows you to set the maximum bandwidth needed for communication. The lower the bandwidth the poorer the call quality. • < 1920 kbps> - < 1472 kbps> - < 1024 kbps> - < 768 kbps> - < 512 kbps> - < 384 kbps> - < 320 kbps> - < 256 kbps> - < 192 kbps> - < 128 kbps> Disabled while on the line.

Input Menu



MENU	DESCRIPTION
Input	Allows you to selectively view the screen of an external input device connected to the monitor. • <PC> - <DVI> - <VC>
PIP Size	Selects the size of the PIP screen. • < > - < > Becomes activated in PIP mode. The PIP mode becomes activated when the LAYOUT button on the remote control is pressed. Applies to the PIP screen within your screen or the remote party's screen during a call. It does not apply to external input.

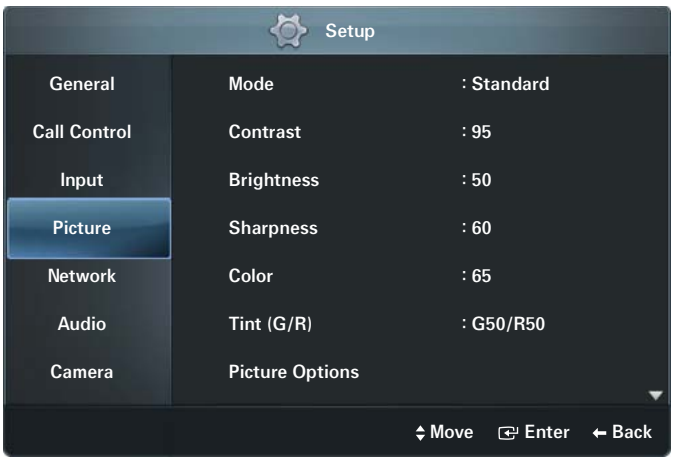
MENU	DESCRIPTION
PIP Position	Moves the PIP screen to a desired location. • <▄> - <▀> - <▀> - <▄> Becomes activated in PIP mode. The PIP mode becomes activated when the LAYOUT button on the remote control is pressed. Applies to the PIP screen within your screen or the remote party's screen during a call. It does not apply to external input.
PIP Transparency	Adjusts the transparency of the PIP screen. • <Opaque> - <Low> - <Medium> - <High> Available in <PC/DVI> Mode only Becomes activated when in PIP mode by pressing the LAYOUT button on the remote control under <PC/DVI> mode.

Picture [PC/DVI] Menu

MENU	DESCRIPTION
MagicBright	Provides the ideal screen settngs for various user environments such as document creation, Internet, movies, etc. • <Entertain> This mode provides brightness and sharpness settings similar to those of a TV for the best entertainment environment (movies, DVDs, etc.). • <Internet> This mode provides the picture settings appropriate for surfing the Internet (text + picture). • <Text> This mode provides the picture settings appropriate for editing a document. • <Custom> If the preset picture modes are not sufficient, users can configure the <brightness> and <Contrast> directly using this mode. Available in <PC> Mode Only
Contrast	Adjusts the Contrast.
Brightness	Adjusts the Brightness.
Sharpness	Adjusts the Sharpness.

MENU	DESCRIPTION
Auto Adjustment	Using the <Auto Adjustment> function, the monitor automatically adjusts video signals it receives. The values of <Fine>, <Coarse> and <PC Position> are adjusted automatically. Available in <PC> Mode Only
Screen	• <Coarse> Removes noise such as vertical stripes. <Coarse> adjustment may move the screen image area. You may relocate it to the center using the horizontal control menu. • <Fine> Removes noise such as horizontal stripes. If the noise persists even after <Fine> tuning, repeat <Fine> tuning after adjusting the frequency (<Coarse>). • <PC Position> Adjusts the screen location horizontally and vertically. • <Image Reset> Image parameters are replaced with the factory default values. Available in <PC> Mode Only
Picture Option	• <Color Tone> - The tone of the color can be changed. <Cool> - <Warm> - <Standard> - <Custom> • <R-Gain > - < G-Gain > - <B-Gain > Adjusts the individual R, G, B (Red, Green, Blue) color controls. • <Size> - You can switch the Size. <16:9> - <4:3> • <Digital NR> - Digital Noise Reduction. <Off> - <Low> - <Midium> - <High> - <Auto> Available in <VC> Mode Only
Picture Reset	Returns all the screen mode settings to factory defaults. • <Reset Picture Mode> - <Cancel>

Picture [VC] Menu



MENU	DESCRIPTION
Mode	Select a pre-set screen mode for the monitor or change the screen settings to suit your preferences. • <Dynamic> Select this mode to view a sharper image than in <Standard> mode. • <Standard> Select this mode when the surroundings are bright. This also provides a sharp image. • <Movie> Select this mode when the surroundings are dark. This will save power and reduce eye fatigue.
Contrast	Adjusts the Contrast.
Brightness	Adjusts the Brightness.
Sharpness	Adjusts the Sharpness.
Color	Adjusts color saturation of the picture.
Tint (G/R)	Adjusts the color tint of the picture.
Picture Option	• <Color Tone> - The tone of the color can be changed. <Cool2> - <Cool1> -<Normal> - <Warm1> - <Warm2> <Warm1> and <Warm2> can only be selected when <Mode> is set to <Movie>. • <Digital NR> - Digital Noise Reduction. <Off> - <Low> - <Midium> - <High> - <Auto>
Picture Reset	Returns all the screen mode settings to factory defaults. • <Reset Picture Mode> - <Cancel>

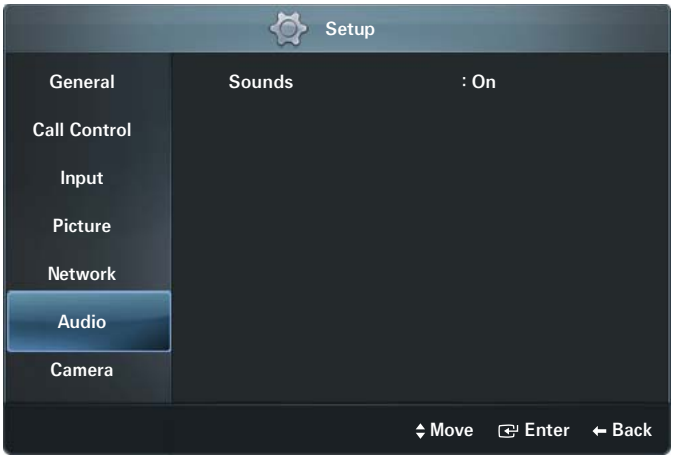
Network

The network menu is disabled while on the line.

MENU	DESCRIPTION
IP Settings	Configure the IP address. • <Dynamic> - Allocates a dynamic IP address. • <Static> - Allocates a static IP address.
User Name	Set the user name that will be used to logon to the SIP server or H.323 Gatekeeper.
Phone Number	Set the phone number that will be used to make a call as an E.164 address to be sent to the H.323 Gatekeeper.

MENU	DESCRIPTION
Network Preference	Select the basic protocol to be used during a call.
H.323 Settings	Change the H.323 settings (gatekeeper, etc.).
SIP Settings	Configure the SIP proxy server information. • <SIP Proxy Server> - Turn on/ off the proxy server. • <Display Name> - Enter the name with which the device can be recognized on a network. • <Server Address> - Enter the address of the proxy server. • <Password> - Enter the user password.
Network Test	Check the current network condition. View settings such as MAC Address, IP Address, Subnet Mask, Gateway, DNS, Gateway ping and IP Collision. The (✓) mark appearing before each item indicates it is functioning properly and the (✗) mark indicates it is not functioning properly. If the (✗) mark appears during a network test, it will not proceed to the next step.

Audio



MENU	DESCRIPTION
Sounds	Turn <Sounds> (incoming call ring, outgoing call ring, etc.) on or off. • <On> - <Off> Disabled while on the line.

Camera

MENU	DESCRIPTION
Power Frequency	Adjust the camera frequency. • <50 Hz> - < 60 Hz>
White Balance	Adjust the white balance of the camera images. • <Auto> - <Manual>
Brightness	Adjust the brightness of the camera images. • <Auto> - <Manual>
Flip	Reverse images on the camera screen. • <Normal> - <Horizontal> - <Vertical> - <Horiz. + Verti.>

Pointing the camera directly at a light source, such as an electric lamp, can cause blurry images.
The picture may look unnatural in a dark environment.

4 Troubleshooting

4-1 Monitor Self-Diagnosis

- You can check if the product is working properly by using the Self-Diagnosis function.
- If the monitor displays a blank screen and the Power LED blinks even if the product and the PC are connected, run the Self-Diagnosis function.

To run a Self-Diagnosis on your monitor, follow these steps:

1. Turn the monitor and the PC off.
2. Separate the D-Sub cable from the product .
3. Turn the monitor on.
4. If the monitor is working properly, the 'Check Signal Cable' message appears.

4-2 Before Requesting Service

• Please check the following solutions before requesting after-sales service. If the problem continues, please contact your nearest Samsung Electronics Service Center or visit the Support page at www.samsung.com.

A BLANK SCREEN APPEARS / I CANNOT TURN THE PRODUCT ON	
Is the power cord connected properly?	Make sure the power cord is plugged in correctly at both ends.
Is the “Check Signal Cable” message displayed on the screen?	Check the cable connecting the PC and the product. If the cable is connected properly, press the [↵/SOURCE] button repeatedly to confirm that the product is set to the correct source and that it is receiving an input signal.
Is the “Not Optimum Mode” message displayed on the screen?	This occurs when the signal from the graphics card exceeds the maximum resolution or the maximum frequency (refresh rate) capability of the product. In this case, set up the appropriate resolution and the frequency for the product. For the correct values, see the Standard Signal Mode Table.
Is a blank screen displayed and does the power LED blink at a 1 second interval?	This occurs when the power saving function is running. To turn on the screen, click the mouse or press any key.
Did you connect with a DVI cable?	If you connect the DVI cable while the PC is booting up or if you reconnect the DVI cable after disconnecting the cable while the PC is on, the screen may not display because some graphics cards can not output a video signal under these conditions. In this case, reboot the PC while the DVI cable is connected.
THE COLOR IS WEIRD / THE PICTURE IS DISPLAYED IN BLACK AND WHITE	
Is the entire screen displayed in the same color as if viewing the screen through a cellophane paper?	Check the cable connection to the computer. Reinsert the graphics card into the computer completely. Check if the <Color Effect> is set to <Off>.
Is the graphics card configured correctly?	Reconfigure the graphics card referring to the card's user manual.
THE DISPLAY AREA SUDDENLY MOVES TO AN EDGE OR TO THE CENTER.	
Did you change the graphics card or the driver?	Try to run <Auto Adjustment> in <Picture> under <Settings>.
Did you change the resolution or frequency (refresh rate)?	Set the graphics card to the appropriate resolution and frequency. For the correct values, see the Standard Signal Mode Table.
Is the graphics card configured correctly?	Reconfigure the graphics card referring to the card's user manual.
THE PICTURES ARE OUT-OF-FOCUS.	
Did you change the resolution or frequency (refresh rate)?	Set the graphics card to the appropriate resolution and frequency. For the correct values, see the Standard Signal Mode Table.

THE COLOR IS DISPLAYED IN 16 BIT (16 COLORS). THE COLOR HAS BEEN CHANGED AFTER CHANGING THE GRAPHICS CARD.	
Did you install the device driver for the product?	Windows ME/XP/2000 : Set the color again by selecting Control Panel ⟶ Display ⟶ Settings.
Is the graphics card configured correctly?	Configure the color again in accordance with the new graphics card driver.
WHEN I CONNECT THE MONITOR, THE 'UNKNOWN MONITOR, PLUG&PLAY (VESA DDC) MONITOR FOUND' MESSAGE IS DISPLAYED.	
Did you install the device driver for the product?	Install the device driver referring to the directions for installing the driver in this manual.
Check if all the Plug&Play (VESA DDC) functions are supported referring to the User Manual of the graphics card.	If your graphcs card supports the Plug&Play functions, reinstall the card's driver. See the card's Users Manual for instructons.
WHEN I LOOK AT THE EXTERIOR EDGES OF THE PRODUCT, I SEE SMALL DISTORTIONS.	
To protect the screen, the black edges of this product are coated with a transparent material that softens the colors at the screen's edges. This material can sometimes cause small distortions in the picture at the edges of the screen. This is not a defect in the product.	
I HEAR A “BEEP, BEEP” SOUND WHEN BOOTING THE COMPUTER.	
If you hear three or more beeps in succession when booting up the computer, your computer requires service.	

4-3 FAQ

FAQ	PLEASE TRY THE FOLLOWING
How can I change the frequency (refresh rate) of the video signal?	You have to change the frequency of the graphics card. Windows XP : Change the frequency by selecting Control Panel ⟶ Appearance and Themes ⟶ Display ⟶ Settings ⟶ Advanced ⟶ Monitor, and then change the refresh rate under Monitor Settings. Windows ME/2000 : Change the frequency by selecting Control Panel ⟶ Display ⟶ Settings ⟶ Advanced ⟶ Monitor, and then change the refresh rate under Monitor Settings. For more information, refer to the User Manual of the computer or the graphics card.
How can I change the resolution?	Windows XP : Change the resolution by selecting Control Panel ⟶ Appearance and Themes ⟶ Display ⟶ Settings. Windows ME/2000 : Change the resolution by selecting Control Panel ⟶ Display ⟶ Settings. For more information, refer to the User Manual of the computer or the graphics card.
How can I use the power saving function?	Windows XP : Configure it by selecting Control Panel ⟶ Appearance and Themes ⟶ Display ⟶ Screen Saver Setting or configure it in the BIOS Setup of the computer. Windows ME/2000 : Configure it by selecting Control Panel ⟶ Display ⟶ Screen Saver Setting or Configure it in the BIOS Setup of the computer. For more information, refer to the Windows user manual for the computer.

5 More Information

5-1 Specifications

MODEL NAME		VC240
LCD Panel	Size	23.6 inch (59 cm)
	Display area	521.28 mm (H) x 293.22 mm (V)
	Pixel Pitch	0.2715 mm (H) x 0.2715 mm (V)
Synchroniza-tion	Horizontal	30 kHz ~ 81 kHz
	Vertical	56 Hz ~ 75 Hz
Display Color		16.7 M
Resolution	Optimum resolution	1920 X 1080 @ 60 Hz
	Maximum resolution	1920 X 1080 @ 60 Hz
Input Signal, Terminated		RGB Analog, DVI-D(Digital Visual Interface) 0.7 Vp-p ± 5 % Separate H/V sync, Composite TTL Level (V high ≥ 2.0 V, V low ≤ 0.8 V)
Maximum Pixel Clock		170 MHz (Analog, Digital)
Power Supply		This product supports 100 - 240 V. Since the standard voltage may differ from country to country, please check the label on the back of the product.
Signal connectors		15pin D-sub connector, 24pin DVI-D connector, Analog Sound In (Phone Jack), Mic In (Phone Jack), Headphone Out (Phone Jack), RJ-45 Ethernet Jack x2, 1 USB Jack for service port
Dimensions (WxHxD) / Weight (Simple stand)		568.6 x 397.4 x 77.7 mm / 22.4 x 15.6 x 3.1 inch (Without Stand) 568.6 x 440.0 x 226.0 mm / 22.4 x 17.3 x 8.9 inch / 8.8 kg / 19.4 lbs (With Stand)
VESA Mounting Interface		200 x 100 mm / 100 x 100 mm
Environmen-tal consider-ations	Operating	Temperature : 50°F ~ 104°F (10°C ~ 40°C) Humidity :20 % ~ 80 %, non-condensing
	Storage	Temperature : -4°F ~ 113°F (-20°C ~ 45°C) Humidity : 5 % ~ 95 %, non-condensing
Tilt		-1° ~ 25°

Class B (Information Communication equipment for residential use)

This device has been registered regarding EMI for home use (Class B). It may be used in all areas. (Class B equipment emits less electromagnetic waves than Class A equipment.)

5-2 Power Saving Function

This product provides a power saving function that automatically turns the screen off when the product is not used for a predetermined period of time to reduce power consumption. If the product enters power saving mode, the power LED turns to a different color to indicate that the product is in power saving mode.

When the product is in power saving mode, the power is not turned off and you can turn the screen on again by pressing any key or clicking the mouse. However, the power saving function only works when the product is connected to a computer that provides the power saving function.

STATE	NORMAL OPERATION	POWER SAVING MODE	POWER OFF (POWER-BUTTON)
Power Indicator	On	Blinking	Off
Power Consumption	Less than 85 W	Less than 3 W	Less than 3 W

If there is no power cut-off switch, the power consumption is "0" only when the power cord is disconnected.

The Power Saving function is activated if <Max. Power Saving> is set to <On> under <PC/DVI> mode.

5-3 Contact SAMSUNG WORLDWIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

NORTH AMERICA		
U.S.A	1-800-SAMSUNG(726-7864)	http://www.samsung.com/us
CANADA	1-800-SAMSUNG(726-7864)	http://www.samsung.com/ca
MEXICO	01-800-SAMSUNG(726-7864)	http://www.samsung.com/mx
LATIN AMERICA		
ARGENTINA	0800-333-3733	http://www.samsung.com/ar
BRAZIL	0800-124-421 4004-0000	http://www.samsung.com/br
CHILE	800-SAMSUNG(726-7864)	http://www.samsung.com/cl
COLOMBIA	01-8000112112	http://www.samsung.com/co
COSTA RICA	0-800-507-7267	http://www.samsung.com/latin
ECUADOR	1-800-10-7267	http://www.samsung.com/latin
EL SALVADOR	800-6225	http://www.samsung.com/latin
GUATEMALA	1-800-299-0013	http://www.samsung.com/latin
HONDURAS	800-7919267	http://www.samsung.com/latin
JAMAICA	1-800-234-7267	http://www.samsung.com/latin
NICARAGUA	00-1800-5077267	http://www.samsung.com/latin
PANAMA	800-7267	http://www.samsung.com/latin
PUERTO RICO	1-800-682-3180	http://www.samsung.com/latin
REP. DOMINICA	1-800-751-2676	http://www.samsung.com/latin
TRINIDAD & TOBAGO	1-800-SAMSUNG(726-7864)	http://www.samsung.com/latin
VENEZUELA	0-800-100-5303	http://www.samsung.com/latin
EUROPE		
AUSTRIA	0810 - SAMSUNG(7267864,€ 0.07/min)	http://www.samsung.com/at
BELGIUM	02 201 2418	http://www.samsung.com/be (Dutch) http://www.samsung.com/be_fr (French)
CZECH REPUBLIC	800 - SAMSUNG (800-726786)	http://www.samsung.com/cz
	Distributor pro Českou republiku: Samsung Zrt., česká organizační složka, Oasis Florenc, Sokolovská394/17, 180 00, Praha 8	
DENMARK	8 - SAMSUNG (7267864)	http://www.samsung.com/dk
EIRE	0818 717 100	http://www.samsung.com/ie
FINLAND	30 - 6227 515	http://www.samsung.com/fi
FRANCE	01 4863 0000	http://www.samsung.com/fr
GERMANY	01805 - SAMSUNG (7267864,€ 0.14/ Min)	http://www.samsung.de

EUROPE		
HUNGARY	06-80-SAMSUNG(726-7864)	http://www.samsung.com/hu
ITALIA	800-SAMSUNG(726-7864)	http://www.samsung.com/it
LUXEMBURG	02 261 03 710	http://www.samsung.com/lu
NETHERLANDS	0900 - SAMSUNG (0900-7267864) (€ 0.10/Min)	http://www.samsung.com/nl
NORWAY	3 - SAMSUNG (7267864)	http://www.samsung.com/no
POLAND	0 801 1SAMSUNG (172678) 022 - 607 - 93 - 33	http://www.samsung.com/pl
PORTUGAL	808 20 - SAMSUNG (7267864)	http://www.samsung.com/pt
SLOVAKIA	0800-SAMSUNG(726-7864)	http://www.samsung.com/sk
SPAIN	902 - 1 - SAMSUNG (902 172 678)	http://www.samsung.com/es
SWEDEN	0771 726 7864 (SAMSUNG)	http://www.samsung.com/se
SWITZERLAND	0848-SAMSUNG(7267864, CHF 0.08/ min)	http://www.samsung.com/ch
U.K	0845 SAMSUNG (7267864)	http://www.samsung.com/uk
CIS		
BELARUS	810-800-500-55-500	
ESTONIA	800-7267	http://www.samsung.com/ee
LATVIA	8000-7267	http://www.samsung.com/lv
LITHUANIA	8-800-77777	http://www.samsung.com/lt
MOLDOVA	'00-800-500-55-500	
KAZAKHSTAN	8-10-800-500-55-500	http://www.samsung.com/kz_ru
KYRGYZSTAN	00-800-500-55-500	
RUSSIA	8-800-555-55-55	http://www.samsung.ru
TADJIKISTAN	8-10-800-500-55-500	
UKRAINE	8-800-502-0000	http://www.samsung.ua http:// www.samsung.com/ua_ru
UZBEKISTAN	8-10-800-500-55-500	http://www.samsung.com/kz_ru
ASIA PACIFIC		
AUSTRALIA	1300 362 603	http://www.samsung.com/au
CHINA	400-810-5858 010-6475 1880	http://www.samsung.com/cn
HONG KONG	3698 - 4698	http://www.samsung.com/hk http://www.samsung.com/hk_en/
INDIA	3030 8282 1800 110011 1-800-3000-8282	http://www.samsung.com/in
INDONESIA	0800-112-8888	http://www.samsung.com/id
JAPAN	0120-327-527	http://www.samsung.com/jp

ASIA PACIFIC		
MALAYSIA	1800-88-9999	http://www.samsung.com/my
NEW ZEALAND	0800 SAMSUNG (0800 726 786)	http://www.samsung.com/nz
PHILIPPINES	1800-10-SAMSUNG(726-7864) 1800-3-SAMSUNG(726-7864) 1800-8-SAMSUNG(726-7864) 02-5805777	http://www.samsung.com/ph
SINGAPORE	1800-SAMSUNG(726-7864)	http://www.samsung.com/sg
THAILAND	1800-29-3232 02-689-3232	http://www.samsung.com/th
TAIWAN	0800-329-999	http://www.samsung.com/tw
VIETNAM	1 800 588 889	http://www.samsung.com/vn
MIDDLE EAST & AFRICA		
SOUTH AFRICA	0860-SAMSUNG(726-7864)	http://www.samsung.com/za
TURKEY	444 77 11	http://www.samsung.com/tr
U.A.E	800-SAMSUNG(726-7864) 8000-4726	http://www.samsung.com/ae

5-4 Correct Disposal of This Product (Waste Electrical & Electronic Equipment) - Europe only

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.